

```

105: Account1(){
110:     P1();
115:     Status = P2(Temp);
120:     if (Status==ERROR1){
125:         do-reverse-of-P2();
130:         do-reverse-of-P1();
135:         exit {};
138:     }
139:     temp-was-one=0;
140:     If (Temp==1){
145:         P3();
148:         P4();
150:         P5();
152:         tem p-was-one=1;
153:     }
155:     Status=P6();
160:     if (status==ERROR2) {
165:         do-reverse-of-P6();
170:         If (temp-was-one==1){
175:             do-reverse-of-P5();
178:             do-reverse-of-P4();
180:             do-reverse-of-P3();
183:         }
185:         do-reverse-of-P2();
190:         do-reverse-of-P1();
195:         exit {};
197:     }
199: }
```

FIG. 1
(Prior Art)

```

205: Account1()
206: {
207:     Typedef int (*fptr)0;
208:     Tstep(int, fptr, fptr);
209:     int txid = Tinit();
210:
211:     Tstep(txid, P1(), R1());
212:
213:     Tstep(txid, P2(Temp), R20);
214:     Status = Tstep(txid, P2(Temp), R20);
215:     if (Status == ERROR) {
216:         Tabort(txid);
217:         exit();
218:     }
219:
220:     if (Temp==1){
221:         Tstep(txid, P3(), R3());
222:         Tstep(txid, P4(), R4());
223:         Tstep(txid, P5(), R5());
224:     }
225:
226:     Status = Tstep(txid, P6(), R6());
227:
228:     if (Status == ERROR) {
229:         Tabort(txid);
230:         exit();
231:     }
232:
233:     Tcommit(txid)
234:
235: }

```

FIG. 2

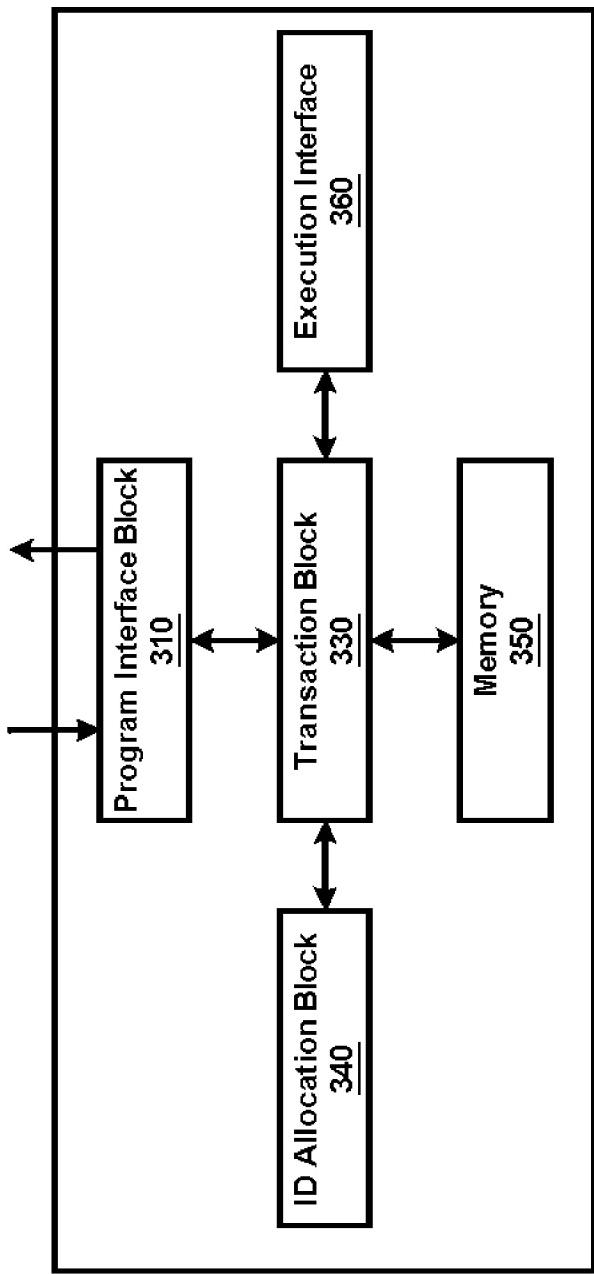


FIG. 3

Transaction Id	Task Procedure	Roll-back Procedure	Stack Status
200	P10	R10	411
200	P20	R20	412
300	P10	R10	413
300	P20	R20	414
300	P30	R30	415
300	P40	R40	416
300	P50	R50	417
200	P60	R60	418
300	P60	R60	419

FIG. 4

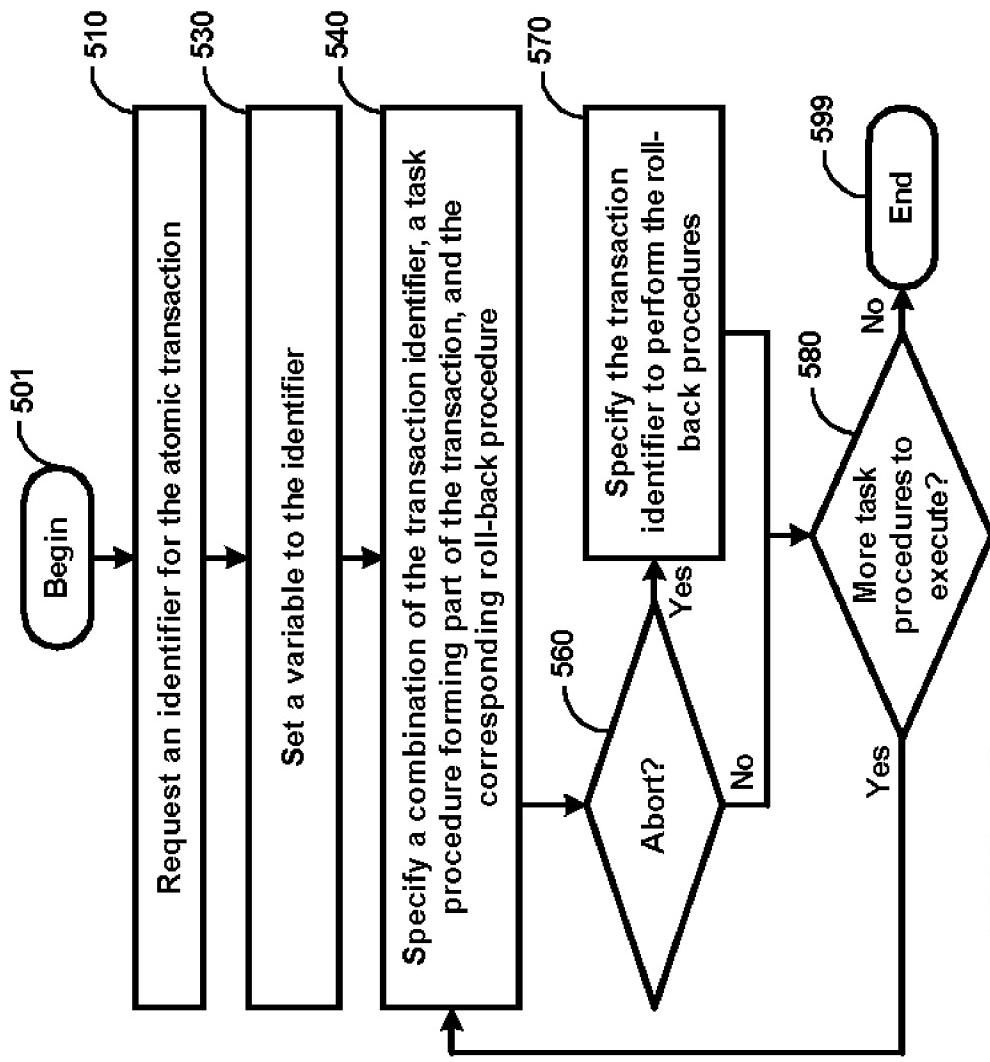


FIG. 5

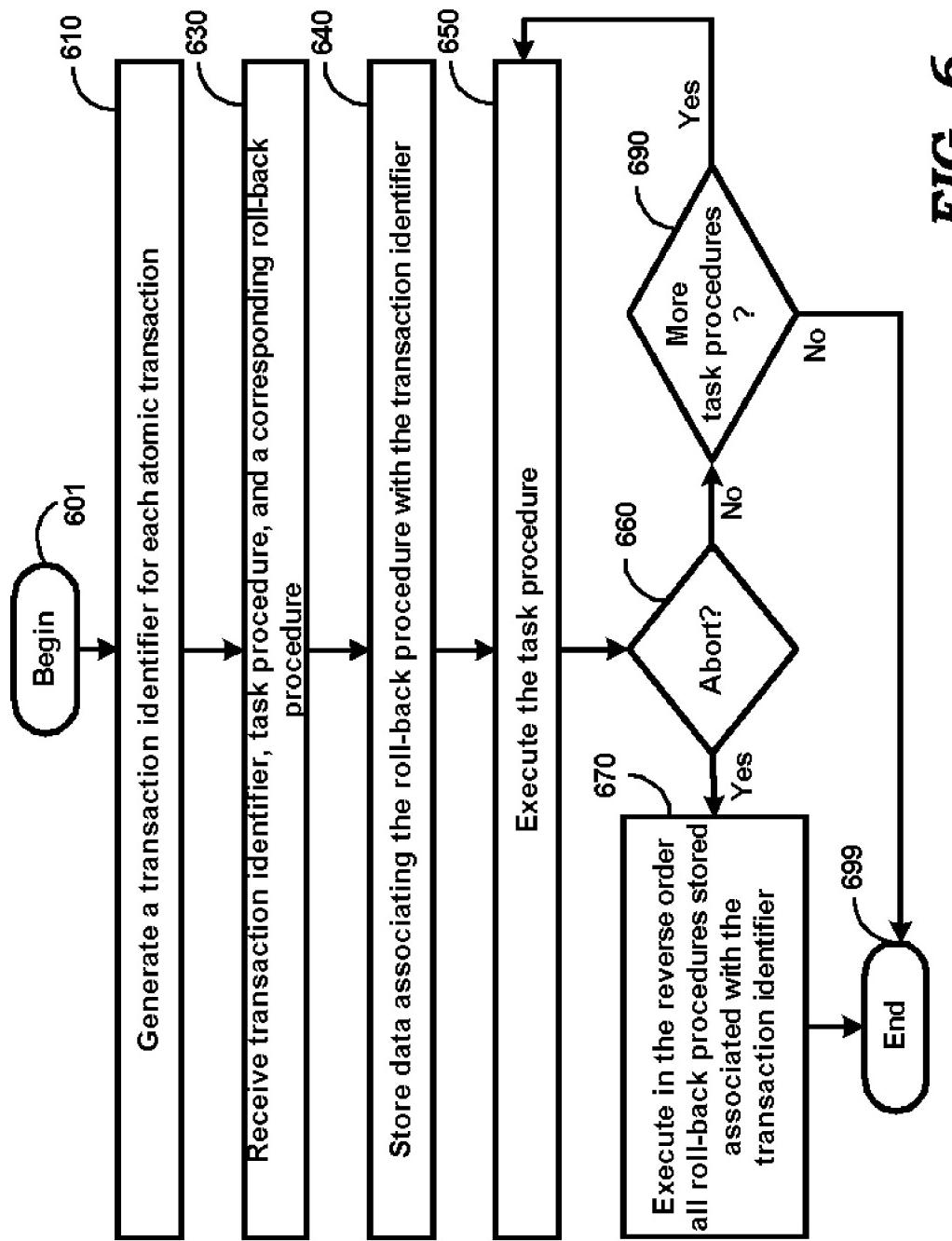


FIG. 6

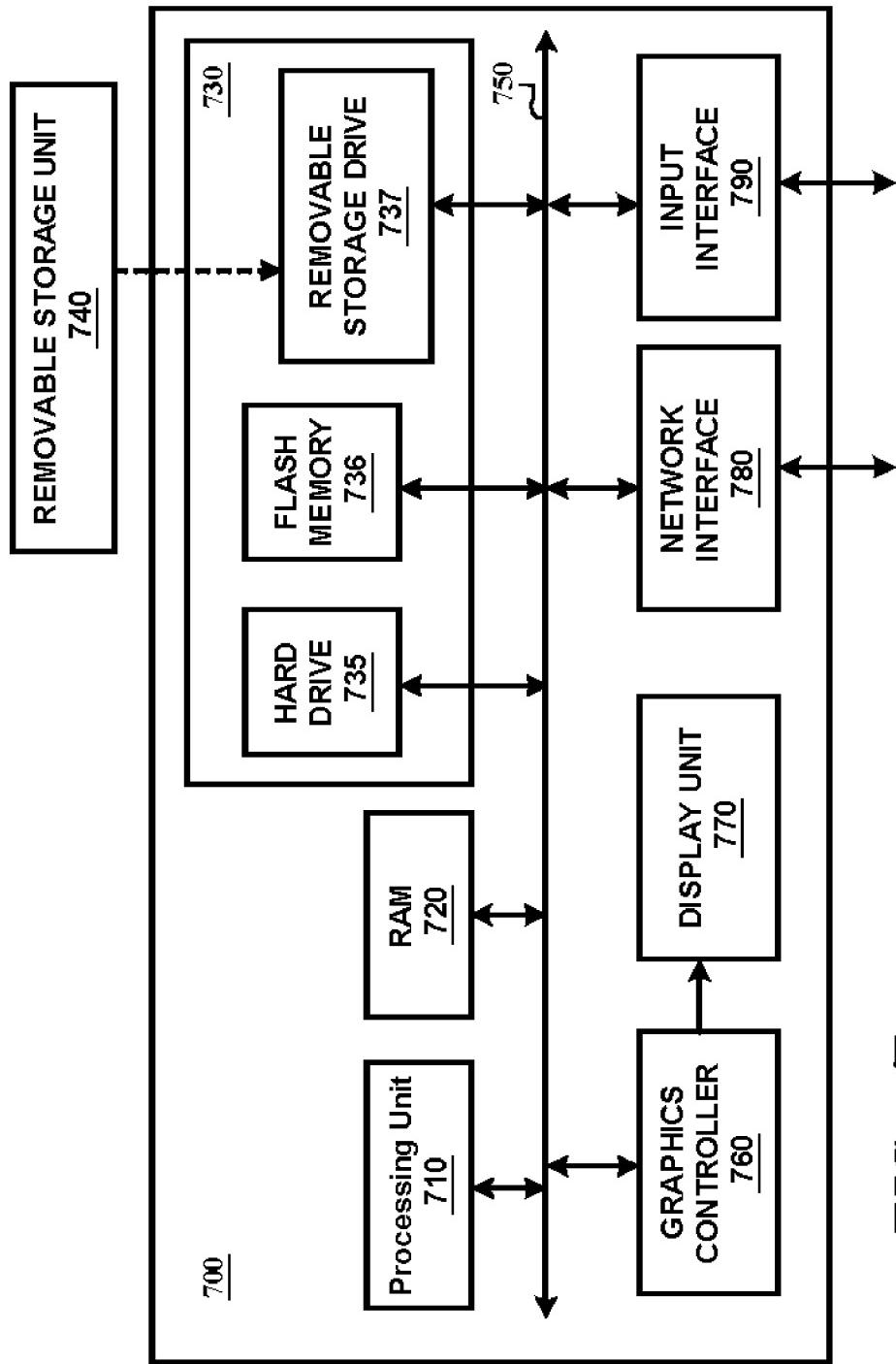


FIG. 7